Exhibit 1

1   UNITED STATES DISTRICT COURT

2   FOR THE NORTHERN DISTRICT OF CALIFORNIA

3   - - - - - - - - - - - - - -x

4   IN RE: WELLS FARGO   :

5   MORTGAGE   :

6   DISCRIMINATION   :   Civil Action No.

7   LITIGATION.   :   3:22-cv-00990-JD

8   :

9   - - - - - - - - - - - - - -x

                                        Tuesday, April 9, 2024

10   Washington, D.C.

11

12

13   Videotaped Deposition of:

14   AMANDA KURZENDOERFER, Ph.D.,

15   called for oral examination by counsel for Wells

16   Fargo, pursuant to notice, at the law offices of

17   McGuire Woods, LLP, 888 16th Street, Northwest, Suite

18   500, Washington, D.C. 20036, before Christina S.

19   Hotsko, RPR, CRR, of Veritext Legal Solutions, a

20   Notary Public in and for the District of Columbia,

21   beginning at 10:06 a.m., when were present on behalf

22   of the respective parties:

                                                      Page 1

1   that's based on a similarly situated analysis,

2   correct?

3   MR. BLISS: Objection. Vague.

4   THE WITNESS: I have an entire section of

5   the report that's devoted to regression analysis   11:07:46

6   that similarly situates applicants. So I have

7   much to say about applicants that are similarly

8   situated. But --

9   BY MS. LIAS-BOOKER:

10   Q.   But you --   11:07:58

11   A.   -- this is ECS analysis, and --

12   Q.   Which is --

13   A.   -- I'm demonstrating -- summarizing the

14   data that show that minority applicants are more

15   likely to be classified into higher risk classes,   11:08:07

16   just raw data. And then conditional on being in

17   those risk classes, they're less likely to be

18   approved.

19   So in that sense, the applicants are

20   similarly situated because I can look at the   11:08:20

21   proportion of white borrowers, white applicants

22   and black applicants, Hispanic applicants, Asian

1   class?

2   A.   No, I did not.

3   Q.   In examining the home equity credit grade

4   or AUS recommendation, did you examine the

5   attributes that those systems consider in arriving   11:42:51

6   at their results?

7   A.   I did not.

8   MR. BLISS: Objection to form.

9   (Kurzendoerfer Deposition Exhibit 695

10   marked for identification and attached to   11:43:48

11   the transcript.)

12   BY MS. LIAS-BOOKER:

13   Q.   Dr. Kurzendoerfer, let me show you what's

14   been marked as Deposition Exhibit 695.

15   Do you recognize that document?   11:43:55

16   A.   I do.

17   Q.   Okay. And for the record, that is the

18   home lending conventional original custom ECS

19   score model number 1190, document version 7.0.

20   And the Bates number at the bottom of the page   11:44:09

21   starts at WF00079826, correct?

22   A.   It's model 11960. But yes.

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1   report is not responding to anything that

2   Dr. Courchane says about the distribution of

3   credit risk classes by race, correct?

4   A.   That's a specific question. But she does

5   introduce business justification for the   13:14:24

6   ECS model.

7   Q.   But I'm asking solely about distribution

8   of credit risk class by race.

9   A.   Right.

10   Q.   Okay. So figures 2 through 4 of your   13:14:32

11   rebuttal are not based on any regression analysis;

12   is that right?

13   A.   That's correct.

14   Q.   Okay. And you also don't report whether

15   any of the results shown in figures 2 through 4   13:14:49

16   are statistically significant, correct?

17   A.   I don't report them. I've since checked

18   and I know that a number of them are.

19   Q.   But in your rebuttal --

20   THE REPORTER: Are or are not?   13:15:08

21   THE WITNESS: Are.

22

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1   guidance.

2   A.   Correct.

3   Q.   Is there --

4   A.   Wells Fargo's approach.

5   MR. BLISS: Objection to form.   13:24:19

6   BY MS. LIAS-BOOKER:

7   Q.   Is there a particular document you relied

8   on?

9   A.   I relied on their fair lending model

10   development documents.   13:24:25

11   Q.   Okay. Now, in figures 2 through 4,

12   though -- okay.

13   In your affirmative report, you did not

14   think the FICO score sufficed to similarly situate

15   applicants, correct?   13:24:57

16   A.   Correct.

17   Q.   Every model looked at other legitimate

18   underwriting factors, debt-to-income, for example,

19   and combined loan-to-value ratios, correct?

20   A.   Correct.   13:25:05

21   MR. BLISS: Objection to form.

22

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1    need an answer to my question.

2              And my question was, and figures 2

3    through 4 in your rebuttal report do not similarly

4    situate applicants with respect to all key

5    legitimate underwriting factors, do they?          13:26:10

6         A.   Correct.

7         Q.   Okay.  Turning to figure 5 of your

8    rebuttal report, that is also not based on any

9    regression analysis, correct?

10        A.   Correct.                                  13:26:51

11        Q.   And you don't report whether any of the

12   results shown in figure 5 are statistically

13   significant, correct?

14        A.   I have not reported statistical

15   significance for this chart.  That's correct.      13:27:06

16        Q.   And for this one, you didn't perform any

17   test of whether any of the results shown in that

18   figure are statistically significant?

19        A.   I don't think so.  But based on my

20   experience in statistics and knowing the size of    13:27:15

21   counts here, I would suspect that the differences

22   are statistically significant.
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 1    the Wells Fargo ECS model.

 2         Q.   And you made no attempt to similarly

 3    situate applicants in figure 5, correct?

 4         A.   I'm just reporting differences in

 5    approval rates.  No.                        13:29:58

 6         Q.   Thank you.

 7              In figure 5, do you treat external AUS

 8    results of approved ineligible as an approval?

 9         A.   Yes, I do.

10         Q.   In paragraph 19 of your rebuttal report,   13:30:07

11    you write -- and I'm quoting -- Dr. Courchane

12    failed to consider Wells Fargo's alternative of

13    not using a disparately impactful custom scoring

14    model in addition to standard credit scores.

15              Did I state that correctly?           13:30:48

16         A.   Yes.

17         Q.   And by standard credit scores, did you

18    mean something like FICO scores?

19         A.   Yes.

20         Q.   Do you think that automated underwriting   13:31:14

21    systems play the same role in underwriting as

22    credit scores?
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1   applicants; is that right?

2   A.   Yes.   That's correct.

3   Q.   Okay.   So do you take this as evidence

4   that there is no discrimination against Asian

5   applicants for nonconforming loans?   13:38:01

6   A.   No.

7   Q.   Okay.   And why not?   Because the --

8   figure 7 is just raw numbers?

9   A.   Correct.

10   Q.   To understand whether there is a   13:38:07

11   disparate impact, you can't look only at approval

12   rates by race.   You agree with me?

13   A.   To understand whether there's a

14   statistical difference not driven by underwriting

15   factors, then yes, I agree that you can't look at   13:38:25

16   the raw uncontrolled numbers.

17   Q.   Don't you need to similarly situate

18   applicants in order to understand if there's a

19   disparate impact?

20   A.   I'm looking at statistical differences,   13:38:36

21   not specifically disparate impact.   So that's -- I

22   would restate that as we need to similarly situate

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 1    specific characteristics of the loan and

 2    creditworthiness?

 3        A.  Yes, as I list specifically -- more

 4    specifically in paragraph 65.

 5        Q.  Okay.                                    13:42:31

 6        A.  Applicant or co-applicant credit score,

 7    et cetera.

 8        Q.  Now -- and forgive me if I asked this

 9    already, but how did you determine what the key

10    underwriting -- oh, skip that.                   13:42:41

11            What experience do you have in

12    underwriting?

13        A.  I'm not an underwriter.

14        Q.  Any training in underwriting?

15        A.  No.                                      13:42:55

16        Q.  Any education in underwriting?

17        A.  No.

18        Q.  Ever been employed by a home mortgage

19    lender?

20        A.  No.                                      13:42:58

21        Q.  Ever been employed by Fannie Mae or

22    Freddie Mac?
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1        A.   No.

2        Q.   Do you know what a regulatory exam is as

3   it relates to a financial institution?

4        A.   Yes.

5        Q.   And how do you know that?   Just from an          13:43:06

6   article or book you've read?

7        A.   Just from my -- yes, reading and

8   research.

9        Q.   Have you ever conducted a fair lending

10  regulatory exam of a mortgage lender?                        13:43:15

11       A.   No.

12       Q.   Have you ever represented a mortgage

13  lender in a fair lending regulatory exam?

14       A.   No.

15       Q.   Now, in your CV, you claim to be an                13:43:23

16  expert in fair lending and disparate impact

17  analysis.   So I'm assuming that none of that

18  included home mortgage underwriting, correct?

19       A.   No underwriting.

20       Q.   And am I correct that your fair lending            13:43:46

21  experience is limited to the Citibank case?

22       A.   Citibank case and another case that is
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1   Q.   And you did nothing to determine why

2   incomplete applications had such an impact on the

3   size of the results that you report.

4   A.   I'm not sure what I could have done. I

5   don't know --   13:56:09

6   Q.   I'm just asking, did you do anything?

7   A.   I didn't do anything.

8   Q.   Okay.

9   A.   No.

10   Q.   Your HMDA control specification controls   13:56:15

11   for external AUS outcome; is that right?

12   A.   Yes.

13   Q.   So does your HMDA and Wells Fargo control

14   specification, correct?

15   A.   Correct.   13:56:30

16   Q.   And in footnote 67 in your report on

17   page 20, I believe, you list the codes you

18   consider to be an approval by an external AUS; is

19   that right?

20   A.   Yes.   13:56:49

21   Q.   Okay. And are these the same codes you

22   used to determine approval by an external AUS in

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 1    your regression models?

 2         A.  Yes.
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 3         Q.  And you consider both approve eligible

 4    and approve ineligible to be approvals; is that

 5    right?                                              13:57:15

 6         A.  I do because they meet the credit risk

 7    standards of the GSEs.

 8         Q.  And you consider -- but one is approve

 9    eligible and the other one is approve ineligible;

10    is that right?                                      13:57:33

11         A.  Yes.

12         Q.  And you consider both accept eligible and

13    accept ineligible to be approvals, correct?

14         A.  I consider them to be approvals in that

15    they satisfy the credit risk standards of the       13:57:40

16    GSEs.

17         Q.  In deciding to treat approve ineligible

18    and accept ineligible results as approvals, did

19    you consider how those results affect the

20    sellability or insurability of these loans?          13:58:03

21         A.  That's not what I was trying to do in the

22    analysis.
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 1    risk standards.

 2         Q.   Were you aware, when you were drafting

 3    this report, that Fannie Mae treats loans

 4    underwritten with desktop underwriter differently

 5    from what it calls manually underwritten loans?        13:59:43

 6         A.   Yes.

 7         Q.   And deciding to treat approve in eligible

 8    results as approvals, did you consider how the

 9    difference between desktop underwriter and

10    manually underwritten loans affects the risk          13:59:58

11    Wells Fargo carries in the event of a borrower's

12    default?

13         A.   Like I said previously, I didn't analyze

14    risk.

15         Q.   And are you aware of the fact the            14:00:09

16    difference between an agency and a nonagency loan

17    is that an agency loan gets sold to Fannie Mae or

18    Freddie Mac, right?

19         A.   Yes.

20         Q.   If someone applies for an agency loan,       14:00:20

21    whether or not the loan can actually be sold to

22    Fannie Mae or Freddie Mac, it is very important
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1   from an underwriting perspective, isn't it?

2   MR. BLISS: Objection. Vague.

3   BY MS. LIAS-BOOKER:

4   Q. If someone -- you understood what I

5   asked?   14:00:38

6   A. It's important from Wells Fargo's,

7   perhaps, risk assessment. But from an

8   underwriting perspective, as to whether it should

9   be used to gauge whether someone is deserving of a

10   loan or not based on their credit standards, I...   14:00:57

11   Q. Doesn't underwriting go to risk? It goes

12   to the bank's risk, right? Isn't that why we

13   underwrite loans?

14   A. And to provide credit.

15   Q. Yes. But one of the elements is risk to   14:01:02

16   the bank, correct?

17   A. Correct.

18   Q. Okay. The difference between a

19   government loan and a conventional loan is that a

20   government loan gets insured by FHA, VA, or USDA.   14:01:09

21   Are you aware of that?

22   A. Yes.

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1   analysis that minority applicants are more likely

2   to be assigned to a lower credit risk class, and,

3   conditional on that, are likely to have lower

4   approval rates.

5   So that is a policy that I've analyzed.   14:48:00

6   I've analyzed overlays in my rebuttal report.

7   Those two things are separate and distinct from

8   the regression analysis, which is simply to

9   attribute -- which is to look at key underwriting

10   factors and to understand whether they can explain   14:48:15

11   the disparities in approval rates, and they can't.

12   BY MS. LIAS-BOOKER:

13   Q.   So your regression analysis is not tied

14   to a particular Wells Fargo policy; isn't that

15   correct?   14:48:27

16   A.   Correct.

17   MR. BLISS: Objection to form. Vague.

18   BY MS. LIAS-BOOKER:

19   Q.   You mentioned several times today about

20   the C1/C2 policy. And in footnote 92 in your   14:49:46

21   report you noted the existence of two policy --

22   oh, sorry.

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 1    AUS returned an accept result?

 2         A.  I don't recall.

 3         Q.  Did you review any loan applications?

 4         A.  I reviewed --

 5              MR. BLISS:  Objection.  Asked and          15:03:22

 6    answered.

 7              THE WITNESS:  I reviewed the data.  I did

 8    not review loan files.

 9    BY MS. LIAS-BOOKER:

10         Q.  Wells Fargo has a lot of credit            15:03:32

11    policies -- big thick binders of credit policies,

12    correct?

13         A.  I believe so.

14         Q.  Is there any particular reason why you

15    chose the three in your rebuttal report to          15:03:46

16    discuss?

17         A.  These seemed --

18              MR. BLISS:  Objection.

19              THE WITNESS:  These seemed obviously

20    related to minority applicants because, based on    15:03:53

21    my work so far, I know that minority applicants

22    disproportionately have lower credit scores and
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 1    higher DTI.

 2    BY MS. LIAS-BOOKER:

 3        Q.   You weren't directed to look at those

 4    particular policies by counsel?

 5            MR. BLISS:  Objection to form.            15:04:14

 6            THE WITNESS:  I was --

 7            MR. BLISS:  Objection.  Rule 26 as well.

 8            MS. LIAS-BOOKER:  What's the Rule 26

 9    objection?

10            MR. BLISS:  Work product.                15:04:29

11            MS. LIAS-BOOKER:  Oh.  So you're

12    instructing her not to answer?  I think we can --

13            MR. BLISS:  No, you can answer.  I'll let

14    her answer.

15            MS. LIAS-BOOKER:  Yeah, yeah, yeah.       15:04:45

16            MR. BLISS:  I think it's work product,

17    but I'll let her answer.  Or it could be.

18            THE WITNESS:  I looked through the

19    overlay spreadsheet, scrolled through it, and

20    discussed with counsel the overlays.             15:04:54

21    BY MS. LIAS-BOOKER:

22        Q.   Were any of the named plaintiffs' loan
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 1    BY MS. LIAS-BOOKER:

 2        Q.   You identify proposed classes or

 3    subclasses as minority applications decisioned

 4    before 2023 that received at least one approval

 5    from an external AUS for -- from Wells Fargo's ECS      16:17:32

 6    model or home equity automated decision engine but

 7    that were ultimately denied by Wells Fargo.

 8            And I'm specifically looking at

 9    paragraph 86 of your report.

10        A.   That's not a definition that I created,        16:17:59

11    but yes, that's the definition of the class.

12        Q.   And that definition was created by the

13    lawyers --

14        A.   That's my understanding.

15        Q.   -- for the plaintiffs.  Okay.                  16:18:10

16            Now, in footnote 109, you state that --

17    you state what counts as an approval for purposes

18    of the proposed class definition, correct?

19        A.   Correct.

20        Q.   Okay.  And you include G1 and G2 results       16:18:35

21    as approvals; is that right?

22        A.   That's correct.
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1   Q.   And those are results of the Wells Fargo

2   government ECS model, correct?

3   A.   That's correct.

4   Q.   You don't count G3 or manual results as

5   approvals, though; is that right?   16:18:53

6   A.   That's correct.

7   Q.   Is that distinction based on a policy

8   difference in how they are treated?

9   A.   That distinction is based on the data. I

10   can see that approval rates are higher for G1 and   16:19:03

11   G2, so that means they're more associated with an

12   application being approved than G3.

13   Q.   And is that the sole basis for the

14   distinction you draw?

15   A.   That's my basis.   16:19:19

16   Q.   Do you have any basis for treating G1s

17   and G2s as approvals but G3s and manuals as

18   denials?

19   A.   My basis is on the approval rates.

20   Q.   And that was not tied or based on any   16:19:41

21   policy document for Wells Fargo, just simply the

22   approval rate numbers.

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1   A.   These were chosen to establish a baseline

2   level of creditworthiness, and so it's based on --

3   purely on approval rates.

4   Q.   That you picked. You drew the line --

5   MR. BLISS: Objection to form.   16:20:06

6   BY MS. LIAS-BOOKER:

7   Q.   -- right, in terms of what you were going

8   to include and not include, correct?

9   A.   I presented the information --

10   Q.   Okay.   16:20:14

11   A.   -- to the lawyers.

12   Q.   And a decision was made to include those

13   groups --

14   A.   That's correct.

15   Q.   -- and not others.   16:20:19

16   Okay. Now, you also include G70, G80,

17   and G90 as approvals.

18   Those are Wells Fargo home equity credit

19   grades; is that right?

20   MR. BLISS: Where are you looking? I'm   16:20:43

21   sorry, I'm not -- are we still on footnote -- oh,

22   I see. 109.

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 1        Q.  You consider external AUS results that

 2   say that an application is ineligible for the

 3   program applied for as an approval, right?

 4        A.  That's one of the --

 5            MR. BLISS:  Objection to form.              16:24:03

 6            THE WITNESS:  That's one of the approval

 7   codes.  Those could occur in conjunction with

 8   ineligible.  Yes.

 9   BY MS. LIAS-BOOKER:

10        Q.  Did plaintiffs' counsel also tell you to   16:24:11

11   count those ineligible results as approvals?

12        A.  Plaintiffs' counsel told me that these

13   are the criteria for the class.

14        Q.  And that included the ineligibles?

15        A.  Yes.                                        16:24:28

16        Q.  Do you know how many non-Hispanic white

17   applicants would meet the proposed class

18   definition but for the fact that they are not

19   minorities?

20            MR. BLISS:  Objection to form.              16:24:43

21            THE WITNESS:  I have looked at that

22   number.
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1   is calculated?

2   A.   I don't know that it is or that it's not.

3   But if the -- those models are saying that the

4   borrower is approved based on creditworthiness,

5   and yet there's no benefit to the borrower, that   16:33:27

6   seems like a disconnect to me. Not that it

7   couldn't happen, but I don't -- I haven't looked

8   at the correlation between those two things.

9   Q.   I'll come back to that.

10   Does your proposed class exclude   16:33:39

11   applications that were denied because they were

12   incomplete?

13   MR. BLISS: Objection to form. Lack of

14   foundation.

15   THE WITNESS: No.   16:33:52

16   MR. BLISS: And mischaracterizes the

17   evidence -- or the testimony.

18   BY MS. LIAS-BOOKER:

19   Q.   Your proposed class --

20   MS. LIAS-BOOKER: Give me one second.   16:34:02

21   BY MS. LIAS-BOOKER:

22   Q.   Okay. Your proposed class does not

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1   in your report yield a predicted probability of

2   approval for each application based on the factors

3   controlled for by that model, correct?

4   A.   Correct.

5   Q.   Did you limit inclusion in your list of   16:40:02

6   proposed class members to applications that your

7   models predicted had a better than 50 percent

8   probability of approval?

9   A.   No.

10   Q.   So your list of proposed class members   16:40:15

11   includes applications that your own models predict

12   would -- likely would have been denied, regardless

13   of race, correct?

14   MR. BLISS: Objection to form.

15   THE WITNESS: That's not the purpose of   16:40:28

16   the model. It's not -- the purpose of the model

17   is not to predict. It's to identify marginal

18   effects for race.

19   BY MS. LIAS-BOOKER:

20   Q.   But my question to you that I need an   16:40:41

21   answer to is, your list of proposed class members

22   includes applications that your own models predict

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1   would likely have been denied, regardless of their

2   race, correct?

3   MR. BLISS: Objection to form -- form.

4   THE WITNESS: Yes. And --

5   MR. BLISS: Mischaracterizes -- sorry, go   16:41:05

6   ahead.

7   THE WITNESS: Yes. And the reason that I

8   did that is because it's not a predictive model.

9   BY MS. LIAS-BOOKER:

10   Q. But the logic [sic] regression report you   16:41:18

11   did yielded a predicted probability of approval

12   for each application, correct?

13   A. It does.

14   Q. Okay. Please turn to table A7.2 of

15   Dr. Courchane's rebuttal report. And looking   16:41:33

16   at -- I think it's at page 73.

17   Do you see the predicted probabilities of

18   approval for named plaintiff Bryan Brown?

19   A. I do.

20   Q. Okay. And depending on whether the   16:42:06

21   number is based on figure 24 or figure 34 of your

22   report, Dr. Courchane says that the probability of

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 1    than it would have been had they been white

 2    applications?

 3            MR. BLISS:  Objection to form.

 4            THE WITNESS:  In aggregate, yes.

 5    BY MS. LIAS-BOOKER:                            16:44:38

 6        Q.  Based on the marginal effects you report

 7    in figure 34, are you able to say what percent of

 8    the black refinance applications in your proposed

 9    class would have been approved if they had been

10    white, according to your model?                16:44:50

11        A.  No.

12        Q.  Can you say confidently that at least

13    half of the proposed class would have been

14    approved had they been write based on these

15    marginal effects?                              16:45:05

16        A.  I can't say --

17            MR. BLISS:  Objection to form.

18    BY MS. LIAS-BOOKER:

19        Q.  Can you say that as to at least

20    25 percent?                                    16:45:11

21            MR. BLISS:  Objection to form.

22            THE WITNESS:  I cannot quantify that.
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1   BY MS. LIAS-BOOKER:

2   Q. How about at least as to 15 percent?

3   MR. BLISS: Objection to form.

4   THE WITNESS: I don't think you can

5   answer that question. You would have to make   16:45:32

6   assumptions about at what probability should a

7   minority applicant have been approved.

8   BY MS. LIAS-BOOKER:

9   Q. So you can't tell us today whether at

10   least 15 percent would have been approved?   16:45:43

11   MR. BLISS: Objection to form.

12   BY MS. LIAS-BOOKER:

13   Q. Is that your testimony?

14   A. If we were to make certain assumptions

15   about what thresholds would -- should constitute   16:45:52

16   an approval, then I could do that calculation.

17   Q. But you have not done that, correct?

18   A. Correct.

19   Q. Does your report identify which proposed

20   class members would have been approved if they had   16:46:03

21   been white?

22   MR. BLISS: Objection to form.

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1   CERTIFICATE OF NOTARY PUBLIC

2   I, CHRISTINA S. HOTSKO, the officer before

3   whom the foregoing deposition was taken, do hereby

4   certify that the witness whose testimony appears in

5   the foregoing deposition was duly sworn by me; that

6   the testimony of said witness was taken by me in

7   stenotypy and thereafter reduced to typewriting under

8   my direction; that said statement is a true record of

9   the proceedings; that I am neither counsel for,

10   related to, nor employed by any of the parties to the

11   action in which this statement was taken; and,

12   further, that I am not a relative or employee of any

13   counsel or attorney employed by the parties hereto,

14   nor financially or otherwise interested in the

15   outcome of this action.

16   Dated: 4/12/2024

17

18

19   CHRISTINA S. HOTSKO

20   Notary Public in and for the

        District of Columbia

21

     My commission expires:

22   1 January 2027

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